

# HTML

## Hypertext Markup Language

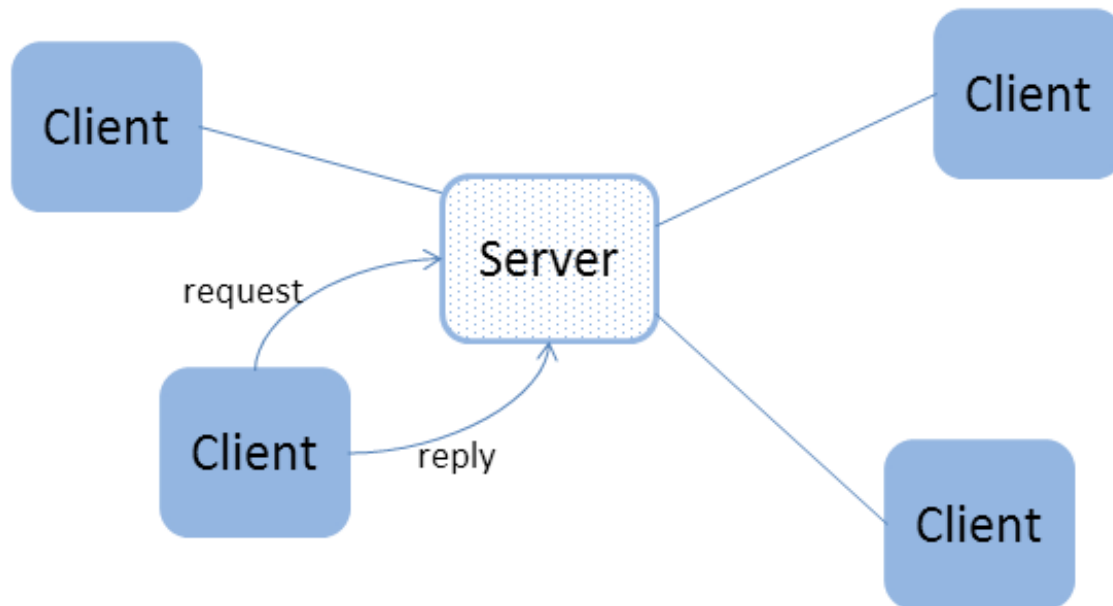


# Terminology

- Uniform Resource Locator (URL)
  - Used to identify webpages and other resources
- Hypertext Transport Protocol (HTTP)
  - Used to transfer webpages from server to browser
- Hypertext Markup Language (HTML)
  - Used to create webpages, parsed by browser



# Client-Server Architecture



# Hypertext Markup Language

- A language for providing the structure of web pages
  - Header, including title, meta info, etc.
  - Body, including headings, paragraphs, lists, etc.
- Markup of actual web pages define like so:
  - `<h1>Some header text</h1>`
  - `<a href="index.html">Home</a>`



# Cascading Style Sheets (CSS)

- A language for describing the presentation of web pages (color, layout, font)
- Contains no information, only style
  - `body { font-size: 12pt; }`
- Provides separation of structure (i.e. content) from presentation (i.e. style)



# Validating HTML

The screenshot shows the W3C Markup Validation Service interface. The browser address bar shows the URL: <https://validator.w3.org/check?uri=http%3A%2F%2Fwww.cs.usfca.edu%2F~srollins%2F&charset=%28detect+automatically%29&doctype=inline&group=0>. The service header indicates it checks the markup (HTML, XHTML, ...) of Web documents. Below the header, there are links for "Jump To: Notes and Potential Issues" and "Congratulations · Icons". A green banner states: "This document was successfully checked as HTML 4.0 Transitional!". Below this, a table displays the validation details:

<b>Result:</b>	Passed, 1 warning(s)		
<b>Address :</b>	<a href="https://www.cs.usfca.edu/~srollins/">https://www.cs.usfca.edu/~srollins/</a>		
<b>Encoding :</b>	utf-8	(detect automatically)	
<b>Doctype :</b>	HTML 4.0 Transitional	(detect automatically)	
<b>Root Element:</b>	HTML		

Below the table, the Mozilla logo is displayed next to the text: "The W3C validators are developed with assistance from the Mozilla Foundation, and supported by community donations. [Donate](#) and help us build better tools for a better web." There is a "Flattr" button on the right. At the bottom, an "Options" section contains several checkboxes: "Show Source", "Show Outline", "List Messages Sequentially" (selected), "Group Error Messages by Type", "Validate error pages", "Verbose Output", and "Clean up Markup with HTML-Tidy". A "Revalidate" button is located at the bottom right of the options section.

<https://validator.w3.org> to check if HTML code is valid



# Resources: Standards

- HTML W3C Standards: <http://www.w3.org/html/>
  - Use HTML 5.2 Specification  
<http://www.w3.org/TR/html5/>
  - CSS W3C Standards:  
<http://www.w3.org/Style/CSS/>
  - Use CSS 2.1 Specification  
<http://www.w3.org/TR/CSS2/>



# Resources: Validation

- HTML Validation  
<http://validator.w3.org/>
- CSS Validation  
<http://jigsaw.w3.org/css-validator/>

**You are expected to generate HTML & CSS code that validates!**





# Resources: References

- Mozilla Developer Network  
<https://developer.mozilla.org/>
- W3 Schools  
<http://www.w3schools.com/>
- HTML Help  
<http://www.htmlhelp.com/>



# Resources: Typography

- Web Typography  
<http://webtypography.net/>
- Web Style Guide Online  
<http://webstyleguide.com/>
- Google Fonts  
<http://www.google.com/fonts>



# Resources: Media

- Wikimedia Commons  
[http://en.wikipedia.org/wiki/Wikimedia Commons](http://en.wikipedia.org/wiki/Wikimedia_Commons)
- The Commons on Flickr  
<http://www.flickr.com/commons>
- Free Icons and Clipart  
<http://icons.mysitemyway.com/>
- Free Backgrounds and Patterns  
<http://webtreats.mysitemyway.com/>



# Resources: Safari Books Online

- Pros
  - Free to USF students
  - Large collection of books to choose from
- Cons
  - Have to use an online reader
  - Can only print 1 page at a time

[http://guides.usfca.edu/using\\_ebooks](http://guides.usfca.edu/using_ebooks)





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CHANGE THE WORLD FROM HERE